

**VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIFICATIONS FOR STANDARD AND NON-STANDARD SEED
Green Tag Program**

PROCEDURES AND RATIONAL

August 2018

Justification:

To provide an unbiased and scientific basis for selection of seed used by Virginia Department of Transportation [VDOT] on construction and roadside maintenance projects.

VDOT Approved Species and Cultivars

Previously VDOT and Virginia Tech conducted field trials to review new cultivars under Virginia roadside conditions before the cultivars were placed on the *VDOT Roadside Vegetation Management Approved Species & Cultivars* list which was known as the RD-4 list. Since VDOT and Virginia Tech have suspended the field trials it has been determined that the *VDOT Roadside Vegetation Management Approved Species & Cultivars* list will be developed by merging the RD-4 List revised, August 2007 with the current *Virginia Turfgrass Variety Recommendation* and the three previous published *Virginia Turfgrass Variety Recommendation*. The Virginia Crop Improvement Association will revise the *VDOT Roadside Vegetation Management Approved Species & Cultivars* list each time a new *Virginia Turfgrass Variety Recommendation* is published.

The *Virginia Turfgrass Variety Recommendation* is developed by the Maryland-Virginia Turfgrass Variety Recommendation Work Group meets each Spring to consider the previous year's data from Virginia and Maryland National Turfgrass Evaluation Program (NTEP) trials and to formulate these recommendations. Virginia and Maryland variety recommendations are essentially identical except for specialized grasses and research situations that differ due to adaptation and state regulation. To qualify for this recommended list turfgrass varieties: 1) must be available as certified seed or, in the case of vegetative varieties, as certified sprigs or sod; 2) must be tested at sites in both Virginia and Maryland; 3) must perform well, relative to other varieties, for a minimum of two years to make the list as a "promising" variety and for three years to make the "recommended" category. All test locations in Virginia and Maryland are considered in making these recommendations.

Single Species Seeding with Base Seed with Nurse Crop and Additive Species

When permanent seeding recommendation is to be completed by adding a base turf seed of a single common species or cultivar, nurse crop and additive species individually to the hydro seeder all common species and cultivars must be selected from the *VDOT Roadside Vegetation Management Approved Species & Cultivars* list. All seed must be green tagged.

Blends

A blend is achieved when more three or more cultivar of a species of grass such as tall fescue* is combined. A tall fescue blend*, fine fescue blend* or bluegrass blend* for example could be presented for Green Tag consideration. When a blend is presented for green tag consideration a minimum of 65% by weight of the cultivars included in the blend must be from ***VDOT Roadside Vegetation Management Approved Species & Cultivars*** list.

When permanent seeding recommendation is to be completed by adding a blended species is added to a specified nurse crop and additive species in the hydro seeder application all seed must be green tagged.

Mixtures

A mixture is achieved when more two or more species of grass such as tall fescue* and bluegrass* are combined. A mixture could be tall fescue blend* or fine fescue blend* to which supplemental species such as bluegrass* or other species has been added could be presented for Green Tag consideration. When a blend is presented for green tag consideration a minimum of 65% by weight of the cultivars included in the blend must be from ***VDOT Roadside Vegetation Management Approved Species & Cultivars*** list. The supplemental species should not be more than 10% of the total mixture by weight.

Mixture	Crop / Percent	Crop/ Percent	Crop / Percent
Tall Fescue/Bluegrass	Tall Fescue 90%	Bluegrass 10%	
Tall Fescue/Fine Fescue	Tall Fescue 50%	Fine Fescue 50%	
Orchardgrass/Bluegrass	Orchardgrass 50%	Bluegrass 50%	
TF/Bluegrass/A. Ryegrass	Tall Fescue 85%	Bluegrass 10%	Annual Ryegrass 5%

When permanent seeding recommendation is to be completed when a mixture of species is added to a specified nurse crop and additive species in a hydro seeder application all seed must be green tagged.

The Virginia Crop Improvement Association (VCIA) will accept the turfgrass blends or mixtures for Green Tag consideration in accordance with established VCIA procedures and protocol.

Temporary Seeding

The Temporary seeding recommendation can be met by a contractor's mixture of VNS fescue and a nurse crop or by a fescue cultivar selected from the ***VDOT Roadside Vegetation Management Approved Species & Cultivars*** list an approved blend or mixture and a selected nurse crop.

If the Contractor's mixture is selected then 70% by weight must be the VNS fescue. All seed must be green tagged.

VDOT Seed Standards

Kind and Cultivars	Min. Pure Seed %	Min. Germ. %	Pure Live Seed Min. %	Min. Germ. Plus Hard Seed %	Weed Seed Not to Exceed %	<u>LIMITATIONS</u>
*Tall Fescue Cultivars:	98	90	88.20%	--	0.25	<u>RES. NOX.</u>
*Kentucky Bluegrass	98	85	83.30%	--	0.25	<u>WEEDSEEDS</u>
*Fine Hard Fescue	98	85	83.30%	--	0.25	Same As VA Seed Law
*Fine Creeping Red Fescue	98	85	83.30%	--	0.25	
*Fine Chewings Fescue	98	85	83.30%	--	0.25	
*Fine Sheep Fescue	98	85	83.30%	--	0.25	
Bermudagrass:	98	85	83.30%	--	0.25	
Zoysiagrass:	98	85	83.30%	--	0.25	<u>WEEDSEEDS</u>
Common bermudagrass (2)	98	85	83.30%			Same As VA Seed Law
Foxtail Millet (German)	98	85	83.30%	--	0.25	
Annual Ryegrass	98	90	88.20%	--	0.25	<u>LAWN & TURF</u>
Rye (Winter Rye) Cultivars:	98	85	83.30%	--	0.25	<u>REST. NOX</u>
Triticum aestivum Wheat	98	85	83.30%	--	0.25	10 Per ounce or 160 Per Pound
Hordeum vulgare (Barley)	98	85	83.30%	--	0.25	
Weeping Love Grass	98	80	78.40%	--	0.25	
Orchardgrass(1)	90	85	76.50%	--	0.5	
Sericea Lespedeza (2), (3)	98	40	73.50%	75	0.5	
Crownvetch Cultivars: (3)	98	36	69.58%	71	0.25	
Flat Pea (3)	99	38	74.25%	75	0.25	
White Dutch Clover (3)	99	80	89.10%	90	0.25	
Birdfoots Trefoil Cultivars: (3)	98	55	78.40%	80	0.5	

***Certified Seed Required For These**

- (1) Virginia origin or approved cultivars.
 - (2) Spring-Hulled, Fall-Unhulled [note hulled = hulls are removed]
 - (3) Seed must be inoculated with the appropriate strain and rate of bacteria.
- For hydroseeding, use a minimum of five times the dry seeding rate of inoculant.

Tall Fescue^{1*}

2nd Millennium	Fesnova	Michelangelo	Spyder LS
3rd Millennium SRP	Firebird	Moondance	SR8650
4th Millennium	Firebird 2	Mustang 4	Standout
Amity	Firecracker SLS	Nightcrawler	Sunset Gold
Annapolis	Firewall	Paramount	Supersonic
AST 7003	Foxhound	Penn RK4	Swagger
AST 9003	Gazelle II	Persuasion	Technique
Avenger	Golconda	Pro Gold	Temple
Avenger II	Gold Medallion	Raptor III	Terrano
Barrington	Grande 3	Rebel Exeda	Thor
Barvado	GTO	Rebel IV	Titan Rx
Birmingham	Guardian 41	Rebel V	Titan Ultra
Black Tail	Hemi,	Rebounder	Titanium
Bladerunner 2	Hot Rod	Reflection	Titanium LS
Bloodhound	Houndog 5	Regenerate	Traverse II SRP
Bullseye	Houndog 8	Rendition RX	Trending
Caesar	Hover	Rhambler 2 SRP	Trinity
Catalyst	Inferno	Rhizing Moon	Titanium 2LS
Crossfire 4	Integrity	Rockwell	Turbo
Dakota	Justice	Rowdy	Turbo RZ
Diablo	Kingdom	Salttillo	Turfway
Doubletake	Leonardo	Screamer LS	Valkyrie LS
Embrace	Lifeguard	Shenandoah Elite	VanGogh
Falcon IV	Maestro	Shenandoah III	Venture
Falcon V	Magellan	Sidewinder	Vert
Fantasia	Meridian	Speedway	Wichita
Fayette			Xtender
			Xtremegreen

Fine Fescue^{1*}

Chewings Fescue

Ambrose	Cascade	Compass II	Shadow 2
Tiffany	Longfellow II	Radar	Fairmont
Intrigue 2	Longfellow 3	Treasure II	Wrigley 2
Zodiac			

Red Fescue^{*}

Jasper 2	Navigator	Razor	
Wendy Jean	Navigator II	Chantilly	Seamist

Hard Fescue^{*}

Aurora Gold	Beacon	Berkshire	Brigade
Chariot	Gladiator	Gotham	Jetty
Minimus	Predator	Reliant IV	Spartan II
SR3100	Sword	Bighorn GT	Resolute

Varieties marked with superscript notations denote the following:

- (1) to be considered for removal in 2013 due to declining performance relative to other varieties.
- (2) to be considered for removal in 2013 due to declining seed quality.
- (3) to be considered for removal in 2013 due to the absence of recent testing of certified seed lots in MD and VA.
- (4) to be considered for removal in 2013 due to lack of recent testing in MD and VA.
- (5) This footnote indicates the possible removal of the variety in 2015 for seed no availability

1 Requires minimum plot coverage of 70% or greater over a three year evaluation period to be included on the VDOT Approved Species and Cultivar list.

Sheeps Fescue

Azure Blue⁽⁵⁾

Bighorn⁽⁵⁾

Quatro⁽⁵⁾

Perennial Ryegrass^{1*}

Applaud	Goalkeeper	Monsieur	Stellar 3 GL
Apple GL	Grand Slam GLD	Octane	Thrive
Apple SGL	Greenland	Palmer V	TransGlobal
ASAP	Homerun	Pirouette	
Aspire	Infusion	Pizzazz	
Bandalore	Integra Supreme	Rio Vista	
Banfield	JetFire	Soprano	
Benchmark	Karma	Stamina	
Dilligent	Legacy 2		
Fiesta 4	Line Drive GLS		

Kentucky Bluegrass^{1*}

Apollo H2O	Courtyard	Kenblue	Ridgeline
Aramintha	Crest	Legend	Shannon
Aries	Deja Blue	Mazama	Skye
Baron	Delta Blue	Mercury	Solar Eclipse
Barserati	Diva	Merlot	Sombrero
Barvette HGT	Endurance	Midnight	SPF30
Beyond	Everglade	Mystee H2O	Sudden Impact
Blue Bank	Full Back	NiGlade	Sudden Impact3
Blue Coat	Granite	Noble	Tejas
Blue Note	Hampton	NuChicago	Touché
Bolt	Heidi	Oasis	Volt
Cabernet	Impact	Quantum Leap	Wildhorse
Conquistador	Keeneland	Raven	

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Bermudagrass¹

Coastal Plain Region only:
Del Sol

Piedmont Region only:

Sahara
Savannah
Yukon

Zoysiagrass¹

Coastal Plain Region only:
Cathay
Zen 300
Zenith

Blue Grama¹

Hachita

Weeping Lovegrass

Common

Miscellaneous Grasses

Tufted Hairgrass¹

Barcampsia

Colonial bentgrass¹

SR7100

Idaho bentgrass¹

Golfstar

Crested Hairgrass/Prairie Junegrass¹ (*Koeleria cristata*)

Barkoel
Barleria

Orchardgrass¹

Potomac
Takena

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Legumes

Birdsfoot Trefoil

AuDewey
Empire
Norecen

Crownvetch

Chemung
Emerald
Penngift

Flat Pea

Common

Sweet Pea

Common

Sericea Lespedeza

Common

White Dutch Clover

Common

Companion or Temporary Species

Annual Ryegrass

Common

Barley

Common

Cereal Rye

Abruzzi
Balboa

German/Foxtail Millet

Common